

### Anti-CD31 antibody ab124432

★★★★★ [4 Abreviews](#) [72 References](#) [4 图像](#)

#### 概述

产品名称	Anti-CD31抗体
描述	兔多克隆抗体to CD31
宿主	Rabbit
经测试应用	适用于: WB, IHC-P
种属反应性	与反应: Mouse
免疫原	Synthetic peptide within Mouse CD31 aa 650 to the C-terminus conjugated to keyhole limpet haemocyanin. The exact sequence is proprietary. (Peptide available as <a href="#">ab155816</a> )
阳性对照	WB: Mouse Heart and Spleen tissue lysates and TH2 whole cell lysate. IHC-P: Mouse Placenta tissue.
常规说明	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### 性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
存储溶液	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituent: PBS</p> <p>Batches of this product that have a concentration &lt; 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.</p>
纯度	Immunogen affinity purified

克隆

多克隆

同种型

IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab124432于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★★★ (1)	Use a concentration of 1 µg/ml. Detects a band of approximately 120-140 kDa (predicted molecular weight: 81 kDa). Abcam recommends using milk as the blocking agent - 3%  Treat samples with PNGase F or phosphatase to confirm the specificity of bands if necessary.  The observed band size of CD31 may not the same as predicted
IHC-P	★★★★★ (2)	Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.  The ideal fixation time will depend on the size of the tissue block and the type of tissue, but fixation between 18–24h is suitable for most samples.

靶标

功能

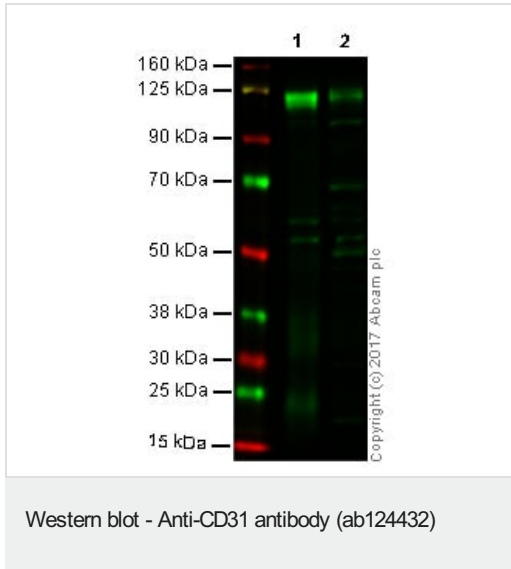
Induces susceptibility to atherosclerosis (By similarity). Cell adhesion molecule which is required for leukocyte transendothelial migration (TEM) under most inflammatory conditions. Tyr-690 plays a critical role in TEM and is required for efficient trafficking of PECAM1 to and from the lateral border recycling compartment (LBRC) and is also essential for the LBRC membrane to be targeted around migrating leukocytes. Prevents phagocyte ingestion of closely apposed viable cells by transmitting 'detachment' signals, and changes function on apoptosis, promoting tethering of dying cells to phagocytes (the encounter of a viable cell with a phagocyte via the homophilic interaction of PECAM1 on both cell surfaces leads to the viable cell's active repulsion from the phagocyte. During apoptosis, the inside-out signaling of PECAM1 is somehow disabled so that the apoptotic cell does not actively reject the phagocyte anymore. The lack of this repulsion signal together with the interaction of the eat-me signals and their respective receptors causes the attachment of the apoptotic cell to the phagocyte, thus triggering the process of engulfment). Isoform Delta15 is unable to protect against apoptosis. Modulates BDKRB2 activation. Regulates bradykinin- and hyperosmotic shock-induced ERK1/2 activation in human umbilical cord vein cells (HUVEC).

组织特异性

Expressed on platelets and leukocytes and is primarily concentrated at the borders between endothelial cells. Isoform Long predominates in all tissues examined. Isoform Delta12 is detected only in trachea. Isoform Delta14-15 is only detected in lung. Isoform Delta14 is detected in all tissues examined with the strongest expression in heart. Isoform Delta15 is expressed in brain, testis, ovary, cell surface of platelets, human umbilical vein endothelial cells (HUVECs), Jurkat T-cell leukemia, human erythroleukemia (HEL) and U937 histiocytic lymphoma cell lines (at protein level).

序列相似性	Contains 6 Ig-like C2-type (immunoglobulin-like) domains.
结构域	The Ig-like C2-type domains 2 and 3 contribute to formation of the complex with BDKRB2 and in regulation of its activity.
翻译后修饰	Phosphorylated on Ser and Tyr residues after cellular activation. In endothelial cells Fyn mediates mechanical-force (stretch or pull) induced tyrosine phosphorylation.
细胞定位	Membrane. Cell junction. Localizes to the lateral border recycling compartment (LBRC) and recycles from the LBRC to the junction in resting endothelial cells and Cell junction. Localizes to the lateral border recycling compartment (LBRC) and recycles from the LBRC to the junction in resting endothelial cells.

图片



**All lanes :** Anti-CD31 antibody (ab124432) at 1 µg/ml

**Lane 1 :** TH2 whole cell lysate

**Lane 2 :** Mouse spleen

Lysates/proteins at 20 µg per lane.

**Secondary**

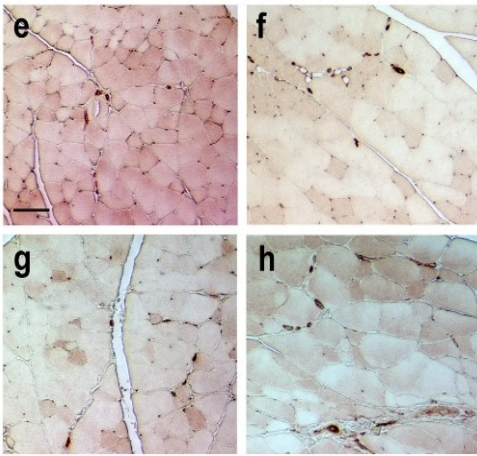
**All lanes :** Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

Performed under reducing conditions.

**Predicted band size:** 81 kDa

**Observed band size:** 120-140 kDa

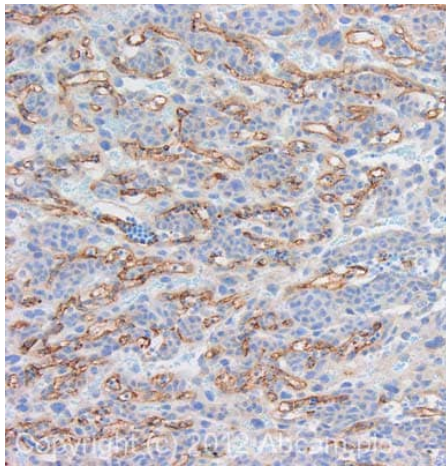
This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using Licor blocking buffer before being incubated with ab124432 overnight at 4°C. Antibody binding was detected using Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ([ab216773](#)) at a 1:10000 dilution for 1hr at room temperature and then imaged.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody (ab124432)

Binder BY et al. Lysophosphatidic acid enhances stromal cell-directed angiogenesis. PLoS One 8:e82134 (2013). Reproduced under the Creative Commons license <http://creativecommons.org/licenses/by/4.0/>

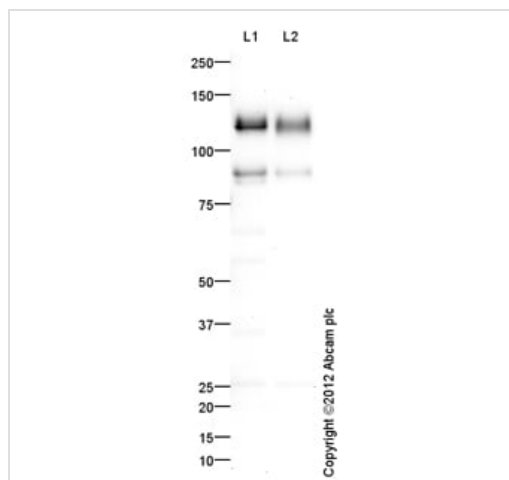
Formalin-fixed, paraffin-embedded ischemic and normal mouse hindlimb tissue stained for CD31 using ab124432 at 1/1000 dilution. The Rabbit specific HRP/DAB detection kit (**ab64261**) was used as the secondary reagent. CD31 staining reveals the formation of larger intramuscular blood vessels in limbs receiving (**h**) both LPA and ASC, while (**e**) normal tissue and defects receiving (**f**) LPA and (**g**) ASC alone have fewer and smaller vessels.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody (ab124432)

IHC image of CD31 staining in mouse placenta formalin fixed paraffin embedded tissue section, performed on a Leica Bond<sup>TM</sup> system using the standard protocol B. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer pH6 for 20 mins. The section was then incubated with ab124432, 1 µg/ml, for 15 mins at room temperature. A goat anti-rabbit biotinylated secondary antibody was used to detect the primary, and visualized using an HRP conjugated ABC system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Western blot - Anti-CD31 antibody (ab124432)

**All lanes** : Anti-CD31 antibody (ab124432) at 1 µg/ml (Milk blocking - 3%)

**Lane 1** : Heart (Mouse) Tissue Lysate

**Lane 2** : Spleen (Mouse) Tissue Lysate

Lysates/proteins at 25 µg per lane.

### Secondary

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 81 kDa

**Observed band size:** 130 kDa

**Additional bands at:** 90 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 20 minutes

Abcam recommends using milk as the blocking agent - 3%. CD31 contains a number of potential glycosylation sites (SwissProt) which may explain its migration at a higher molecular weight than predicted. This blot was produced using a 10% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% Milk before being incubated with ab124432 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution.

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